

In the Claims

1 (Withdrawn). A method of targeting integration of a transgene comprising retrovirus-like nucleic acid into a eukaryotic genome, in which the genome is targeted by a restriction enzyme that binds nucleic acid and the transgene is introduced at the binding site, wherein the endonuclease is specific to a site in an abundant rDNA locus and is fused to an integrase that mediates the introduction of the transgene.

2 (Withdrawn). The method according to claim 1, wherein the genome is human.

3 (Withdrawn). The method according to claim 1, wherein the integrase is a lentivirus integrase.

4 (Withdrawn). The method according to claim 3, wherein the integrase is a HIV-1 integrase.

5 (Withdrawn). The method according to claim 1, wherein the endonuclease is I-PpoI.

6 (Previously presented). A fusion protein which comprises an endonuclease fused to an integrase, wherein the endonuclease is specific to a site in an abundant rDNA locus and is fused to an integrase that mediates the introduction of a transgene comprising retrovirus-like nucleic acid.

7 (Previously presented). The fusion protein according to claim 6, which comprises an HIV-1 integrase and I-PpoI.

8 (Withdrawn). The method according to claim 2, wherein the integrase is a lentivirus integrase.

9 (Withdrawn). The method according to claim 8, wherein the integrase is an HIV-1 integrase.

10 (Withdrawn). The method according to claim 2, wherein the endonuclease is I-Ppol.

11 (Withdrawn). The method according to claim 3, wherein the endonuclease is I-Ppol.

12 (Withdrawn). The method according to claim 4, wherein the endonuclease is I-Ppol.

13 (Withdrawn). The method according to claim 8, wherein the endonuclease is I-Ppol.

14 (Withdrawn). The method according to claim 9, wherein the endonuclease is I-Ppol.

15 (Previously presented). The fusion protein according to claim 6, wherein the endonuclease is I-Ppol.

16 (Previously presented). The fusion protein according to claim 6, wherein the endonuclease is Crel.

17 (Previously presented). The fusion protein according to claim 6, wherein the endonuclease is H98A.

18 (Previously presented). The fusion protein according to claim 6, wherein the integrase is a lentivirus integrase.